

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-26. (CANCELED)

27. (CURRENTLY AMENDED) A boxed set comprising an assay for the early diagnosis of a flaviviral infection, wherein the boxed set comprises ~~comprising~~:

(A) a first antibody, called a capture antibody, which is either (1) a polyclonal antibody ~~preselected by immunocapture on~~ with high affinity for ~~[[the]]~~ NS1 protein of ~~[[the]]~~ a flavivirus in hexameric form, wherein the polyclonal antibody is preselected by immunocapture with the NS1 protein ~~[[is]]~~ in hexameric form or (2) a mixture of purified anti-NS1 monoclonal antibodies ~~preselected for their~~ with high affinity for the NS1 protein of the flavivirus in hexameric form, wherein the monoclonal antibodies are preselected by immunocapture with NS1 protein ~~[[is]]~~ in hexameric form;

(B) a second antibody, called a revelation antibody, which is either (1) a polyclonal antibody directed against NS1 protein in hexameric form or (2) a mixture of monoclonal antibodies directed against ~~[[a]]~~ NS1 protein in hexameric form, wherein the revelation antibody is ~~identifiable with a~~ conjugated to a label;

(C) at least one positive control comprising an NS1 protein of a flavivirus, wherein the NS1 protein is in hexameric form; and,

(D) at least one negative control comprising ~~a normal~~, an uninfected human serum.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

28. (CURRENTLY AMENDED) The boxed set as claimed in claim 27, wherein the NS1 protein is obtained from a culture supernatant either from infected mammalian cells or from mammalian cells transfected with a recombinant plasmid comprising a gene for an NS1 protein of a flavivirus or a fragment of the gene or a fragment of the flaviviral genome, the fragments being capable of expressing all or part of the NS1 protein wherein the NS1 protein or part of the NS1 protein is in hexameric form.

29. (PREVIOUSLY PRESENTED) The boxed set as claimed in claim 27, wherein the NS1 protein is from a dengue virus.

30. (PREVIOUSLY PRESENTED) The boxed set for the early diagnosis of a flaviviral infection as claimed in claim 28, wherein the recombinant plasmid was deposited with the Collection Nationale de Cultures et de Microorganismes under the number I-2220.

31-42. (CANCELED)

43. (NEW) The boxed set as claimed in claim 27, wherein the assay is used to diagnose the flaviviral infection in a primary infection.

44. (NEW) The boxed set as claimed in claim 27, wherein the assay has a sensitivity of at least 1 ng/ml.

45. (NEW) A boxed set comprising an assay for the early diagnosis of a flaviviral infection, wherein the boxed set comprises:

(A) a first antibody, called a capture antibody, which is either (1) a polyclonal antibody with high affinity for NS1 protein of a flavivirus in hexameric form, wherein the polyclonal antibody is preselected by immunocapture with the NS1 protein in hexameric form or (2) a mixture of purified anti-NS1 monoclonal antibodies with high affinity for the

NS1 protein of the flavivirus in hexameric form, wherein the monoclonal antibodies are preselected by immunocapture with NS1 protein in hexameric form;

(B) a second antibody, called a revelation antibody, which is either (1) a polyclonal antibody directed against NS1 protein in hexameric form or (2) a mixture of monoclonal antibodies directed against an NS1 protein in hexameric form, wherein the revelation antibody is produced in a different species of animal than the capture antibody and is identifiable with a label;

(C) at least one positive control comprising an NS1 protein of a flavivirus, wherein the NS1 protein is in hexameric form; and,

(D) at least one negative control comprising an uninfected human serum.

46. (NEW) The boxed set as claimed in claim 45, wherein the NS1 protein is obtained from a culture supernatant either from infected mammalian cells or from mammalian cells transfected with a recombinant plasmid comprising a gene for an NS1 protein of a flavivirus or a fragment of the gene or a fragment of the flaviviral genome, the fragments being capable of expressing all or part of the NS1 protein, wherein the NS1 protein or the part of the NS1 protein is in hexameric form.

47. (NEW) The boxed set as claimed in claim 45, wherein the NS1 protein is from a dengue virus.

48. (NEW) The boxed set for the early diagnosis of a flaviviral infection as claimed in claim 45, wherein the recombinant plasmid was deposited with the Collection Nationale de Cultures et de Microorganismes under the number I-2220.

49. (NEW) The boxed set as claimed in claim 45, wherein the label is conjugated to the revelation antibody.

50. (NEW) The boxed set as claimed in claim 45, further comprising a third antibody, wherein the label is conjugated to the third antibody and the third antibody binds the revelation antibody.

51. (NEW) The boxed set as claimed in claim 43, wherein the assay can diagnose the flaviviral infection in primary infection.

52. (NEW) The boxed set as claimed in claim 45, wherein the assay has a sensitivity of at least 1 ng/ml.